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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,771	05/09/2006	Werner Stockum	MERCK-3187	6210

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EXAMINER	
NGUYEN, HUNG D	

ART UNIT	PAPER NUMBER
3742	

NOTIFICATION DATE	DELIVERY MODE
02/07/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@mwzb.com

Office Action Summary	Application No.	Applicant(s)	
	10/578,771	STOCKUM ET AL.	
	Examiner	Art Unit	
	HUNG NGUYEN	3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 October 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 May 2006* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/07/2010 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 5-6, 9-10, 12-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimokawa (US Pat. 4,847,181) in view of Harrison (US Pub. 2002/0079297) and Harris et al. (US Pat. 6,085,655) (all new cited).

4. Regarding claims 1, 12 and 20, Shimokawa discloses a laser marking method comprising welding a polymer component to a surface (10) under the action of laser light (14) during inscription or marking, where the polymer component is in a layer system which comprises two layers (11 and 13) lying one on top of the other, wherein each of these two layers may contain contains one or more layers, where the first layer (13) comprises a plastic which comprises the transparent film, and the second film (11) serves as inscription medium and comprises a colorant and a polymer component,

wherein the polymer component dissolves together with the colorant (11a) and is then durably welded to the surface (10a). Shimokawa does not discloses the surface is plastic; the two layers separated by a support layer and the first layer absorbed the energy. Harrison discloses the surface (109) to be marked is plastic. Harris et al. discloses the first layer (206) and the second layer (202) are separated by a supported layer (204) and the first layer (206) absorbed the energy. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Shimokawa, the surface is plastic, as taught by Harrison, for the purpose of marking on the plastic surface; the two layers separated by a support layer and the first layer absorbed the energy, as taught by Harris et al., for the purpose of separating the two layers and absorbing the laser energy.

5. Regarding claim 2, Harris et al. discloses the first layer comprises one support layer (204), and the energy absorber (206) is located on the support layers (202) (Col. 4, Lines 44-49).

6. Regarding claim 3, Harris et al. discloses the energy absorber is selected from the group consisting of carbon and metal oxides.

7. Regarding claim 5, Harris et al. disclose the inscription medium essentially consist of a colorant and polymer component (Col. 5, Lines 1-9)

8. Regarding claim 6, Harris et al. discloses the binder is selected from the group consisting of polyester, polyacrylates (Col. 4, Lines 50-62).

9. Regarding claim 9, Harris et al. discloses the polymer component comprises polymers selected from the group consisting of polyester (Col. 4, Lines 50-62).

10. Regarding claim 10, Harris et al. disclose the inscription medium comprises organic or inorganic colorant (Col. 4, Lines 50-52).

11. Regarding claim 13, Harris et al. discloses the second layer (202) comprises the colorant in a separate layer from the polymer component.

12. Regarding claim 14, Shimokawa discloses the first layer (13) and second layer (11) are bonded to one another by adhesive bonding (Col. 2, Lines 29-34).

13. Regarding claim 16, Harris et al. discloses the inscription medium (202) essentially consist of a binder, colorant, polymer and additives.

14. Regarding claim 17, Shimokawa discloses the sublimation of colorant or melting of glass pigment is not achieved, and wherein the inscription or marking is achieved by homogeneous warming the inscription medium (11) and at the same time avoiding local thermal overheating (Col. 3, Line 56 to Col. 4, Line 3).

15. Regarding claims 18-19, Shimokawa discloses a laser marking method comprising welding a polymer component to a surface cowl panel (10) under the action of laser light (14) during inscription or marking, where the polymer component is in a layer system comprises: (A) a plastic layer containing a support layer (13) which is transparent and stable to laser light, and a layer (11) comprising a polymer-containing inscription medium which comprises a colorant and the polymer component, which layer (13) and (11) are bonded to one another to form a unit; (B) a plastic layer containing a support layer (13) which is transparent and stable to laser light, and a layer (11) comprising a polymer-containing inscription medium which comprises a colorant and the polymer component, which layer (13) and (11) are bonded to one another to form a unit;

(C) a plastic layer containing support layer (13) which is transparent and stable to laser light and a layer (11) containing a colorant, which layer (13) and (11) are bonded to one another to form a unit. Shimokawa does not disclose a surface is a plastic; and a plastic layer containing two support layers which have a laser-sensitive energy-absorber layer as interlayer; and a support layer which is doped with an energy absorber and a layer comprising a polymer-containing inscription medium which comprises a colorant and the polymer component which layers are bonded to one another to form a unit. Harrison discloses the surface (109) to be marked is plastic. Harris et al. discloses a plastic layer containing two support layers which have a laser-sensitive energy-absorber layer as interlayer (Col. 4, Lines 41-49 and Col. 5, Lines 41-46); and a support layer (104) which is doped with an energy absorber and a layer (102) comprising a polymer-containing inscription medium which comprises a colorant and the polymer component, which layer (104) and (102) are bonded to one another to form a unit. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Shimokawa, the surface is plastic, as taught by Harrison, for the purpose of marking on the plastic surface; a plastic layer containing two support layers which have a laser-sensitive energy-absorber layer as interlayer; and a support layer which is doped with an energy absorber and a layer comprising a polymer-containing inscription medium which comprises a colorant and the polymer component which layers are bonded to one another to form a unit, as taught by Harris et al., for the purpose of providing a laser energy absorber to convert the radiation to heat and other forms of laser marking component.

16. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimokawa (US Pat. 4,847,181) in view of Harrison (US Pub. 2002/0079297), Harris et al. (US Pat. 6,085,655) and further view of Hiller (US Pub. 2004/0231540) (newly cited).

17. Regarding claim 4, Shimokawa/Harrison/Harris discloses substantially all features of the claimed invention as set forth above **except** the plastic layer comprises 0.01 - 20% by weight of energy absorber. Hiller discloses the plastic layer comprises 0.01 - 20% by weight of energy absorber (Par. 48). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Shimokawa/Harrison/Harris, the plastic layer comprises 0.01 - 20% by weight of energy absorber, as taught by Hiller, for the purpose of having adequate energy absorber component in the layer.

18. Regarding claim 8, Hiller discloses the polymer component in particulate form has particle sizes of 10 nm – 100 µm (Par. 57).

19. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimokawa (US Pat. 4,847,181) in view of Harrison (US Pub. 2002/0079297), Harris et al. (US Pat. 6,085,655) and further view of Delp et al. (US Pub. 2004/0013969) (previously cited).

20. Regarding claim 7**,** Shimokawa/Harrison/Harris discloses substantially all features of the claimed invention as set forth above **except** the inscription medium comprises the polymer component in dissolved or particulate form in an amount of 30-90% by weight. Delp disclose the inscription medium comprises the polymer

component in dissolved or particulate form in an amount of 30-90% by weight (Par. 35). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Shimokawa/Harrison/Harris, the inscription medium comprises the polymer component in dissolved or particulate form in an amount of 30-90% by weight, as taught by Delp, for the purpose of having an improved pigment/colorant layer that applied to the plastic surface.

21. Claims 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimokawa (US Pat. 4,847,181) in view of Harrison (US Pub. 2002/0079297), Harris et al. (US Pat. 6,085,655) and further view of Busch et al. (US Pub. 2004/0071994) (newly cited).

22. Regarding claim 11, Shimokawa/Harrison/Harris discloses substantially all features of the claimed invention as set forth above **except** the inscription medium comprises 0.1 – 30% by weight of colorant, based on the polymer component. Busch et al. discloses the inscription medium comprises 0.1 – 30% by weight of colorant, based on the polymer component (Par. 14). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Shimokawa/Harrison/Harris, the inscription medium comprises 0.1 – 30% by weight of colorant, based on the polymer component, as taught by Busch et al., for the purpose of having adequate colorant in the laser marker.

23. Regarding claim 15, Busch et al. discloses the first and second layers are bonded to one another by hot laminate (Par. 6, Par. 29).

24. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG NGUYEN whose telephone number is (571)270-7828. The examiner can normally be reached on Monday-Friday, 9M-6PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571)272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUNG NGUYEN/
Examiner, Art Unit 3742
1/29/2010

/Quang T Van/
Primary Examiner, Art Unit 3742